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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Jun 03	New e-mail delivery for search results now available
NEWS	4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	7	Sep 03	JAPIO has been reloaded and enhanced
NEWS	8	Sep 16	Experimental properties added to the REGISTRY file
NEWS	9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	11	Oct 24	BEILSTEIN adds new search fields
NEWS	12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	13	Nov 18	DKILIT has been renamed APOLLIT
NEWS	14	Nov 25	More calculated properties added to REGISTRY
NEWS	15	Dec 04	CSA files on STN
NEWS	16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	17	Dec 17	TOXCENTER enhanced with additional content
NEWS	18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	20	Feb 13	CANCERLIT is no longer being updated
NEWS	21	Feb 24	METADEx enhancements
NEWS	22	Feb 24	PCTGEN now available on STN
NEWS	23	Feb 24	TEMA now available on STN
NEWS	24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	25	Feb 26	PCTFULL now contains images
NEWS	26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	27	Mar 20	EVENTLINE will be removed from STN
NEWS	28	Mar 24	PATDPAFULL now available on STN
NEWS	29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	30	Apr 11	Display formats in DGENE enhanced
NEWS	31	Apr 14	MEDLINE Reload
NEWS	32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	33	Apr 21	Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS	34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	35	Apr 28	RDISCLOSURE now available on STN
NEWS	36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	37	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	38	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated

				US 1996-700237 A119960820
				US 1998-128917 A119980804
				US 2000-492011 A120000126
FAN	1995:797470			
	PATENT NO.	KIND	DATE	APPLICATION NO. DATE

PI	WO 9515747	A1	19950615	WO 1994-US14213 19941209
	W: AU, CA, JP			
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			
	US 5468505	A	19951121	US 1993-165392 A 19931210
				US 1993-165392 19931210
				US 1992-843485 B219920228
				US 1993-22687 A219930301
	AU 9513381	A1	19950627	AU 1995-13381 19941209
	AU 690949	B2	19980507	
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PI	WO 9509883	A1	19950413	WO 1994-US11325 19941005
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	US 5462990	A	19951031	US 1993-132507 A 19931005
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				US 1990-598880 A319901015
				US 1991-740703 A219910805
	AU 9479679	A1	19950501	AU 1994-79679 19941005
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				WO 1994-US11325W 19941005
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				WO 1994-US11325W 19941005
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				WO 1994-US14213W 19941209
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				US 1995-569584 B1 19951208
FAN	1996:467217			
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PI	US 5529914	A	19960625	US 1992-958870 19921007
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				US 1992-843485 B2 19920228
				US 1992-870540 A2 19920420
US 5232984	A	19930803	US 1991-740632	19910805
US 5380536	A	19950110	US 1990-598880 A3 19901015	
WO 9316687	A1	19930902	US 1991-740703	19910805
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US 5573934	A	19961112	US 1992-958870 A 19921007
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			WO 1993-US1776 W 19930301
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US 5834274	A	19981110	US 1995-467693 19950606
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US 6465001	B1	20021015	US 1998-33871 19980303
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			US 1993-24657 A319930301
			US 1994-232054 A319940428
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US 2002058318	A1	20020516	US 2001-811901 20010319
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			US 1995-379848 A219950127
			US 1995-510089 B119950801

FAN 1996:717008
PATENT NO.

	KIND	DATE
PI	A	19961112

US 5529914	A	19960625
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US 5858746	A	19990112
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US 5834274	A	19981110
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US 5843743	A	19981201
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US 6465001	B1	20021015
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APPLICATION NO. DATE

US 1993-24657	19930301
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US 1992-958870	A219921007
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US 1991-740632	A319910805
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US 1995-475175	A219950607

FAN 1998:755871
PATENT NO.

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PI	A	19981117

WO 9309176	A2	19930513
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WO 9309176	A3	19930722
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W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP,
KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF,
BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG

US 5700848	A	19971223
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US 5705270	A	19980106
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US 5846530	A	19981208
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US 6465001	B1	20021015
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APPLICATION NO. DATE

US 1994-232054	19940428
US 1991-784267	B219911029
WO 1992-US9364	A 19921029
WO 1992-US9364	19921029
US 1991-784267	A219911029
US 1995-472191	19950607
US 1991-784267	B219911029
US 1994-232054	A319940428
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US 1993-24657	A319930301
US 1994-232054	A319940428
US 1995-467693	A119950606
US 1995-475175	A219950607

AB Crosslinkable polysaccharides, polycations and lipids which are capable of undergoing free radical polymn. are used for encapsulation of drugs, biol.

materials and cells, as well as manuf. of bioadhesives and wound dressing.

Alginate acid was reacted with acryloyl chloride in presence of Et₃NH₂ under N for 24h to obtain alginate acrylate (I). A polymd. crosslinked gel was prepd. contg. I 0.1, acrylamide 0.1, water 3.75, glycerol 1.25, methylene bisacrylamide 0.01g. The gels can be prepd. as flat sheets that can be applied to wounds.

L17 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Polymer-catalyzed synthesis of acid anhydrides

AN 1990:234482 CAPLUS

DN 112:234482

TI Polymer-catalyzed synthesis of acid anhydrides

IN Fife, Wilmer K.; Zhang, Zhi Dong

PA Indiana University Foundation, USA

SO U.S.; 10 pp. Cont.-in-part of U.S. Ser. No. 52,439.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4874558	A	19891017	US 1988-284846 US 1987-52439	19881213 19870521

OS CASREACT 112:234482; MARPAT 112:234482

AB Acid anhydrides are prepd. by reaction of carboxylic acids or carboxylate salts with acid halides or acyl-activating agents (e.g., SOCl₂) at 0.degree. to room temp. in the presence of **catalysts** selected from: (a) solid copolymers of 4-vinylpyridine, (b) solid copolymers of 4-vinylpyridine 1-oxide, and (c) water-sol. homopolymers of 4-vinylpyridine 1-oxide. Thus, reaction of Me(CH₂)₄COCl with PhCO₂H using

Reillex 425 **catalyst** (crosslinked 4-vinylpyridine copolymer) in CH₂Cl₂ at 0.degree. for 10 min to give Me(CH₂)₄CO₂COPh with 94.6% yield and 100% selectivity. Alternatively, use of EtCO₂H and SOCl₂ at 22-25.degree. in CH₂Cl₂ with the same **catalyst** gave 96.0% (EtCO)₂O. Use of acid halides and Na formate with a type (b) **catalyst** gave various mixed formic anhydrides. A type (c) **catalyst** was used with halides and carboxylate salts in H₂O-CH₂Cl₂ mixts.

L17 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Synthesis of (meth)acrylic anhydride from (meth)acrylic acid

AN 1988:22432 CAPLUS

DN 108:22432

TI Synthesis of (meth)acrylic anhydride from (meth)acrylic acid

IN Hurtel, Patrice; Laurent, Denis; Rondini, Joseph

PA Societe Chimique des Charbonnages, Fr.

SO Fr. Demande, 5 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2592040	A1	19870626	FR 1985-19116	19851224

NEWS 39 May 16 CHEMREACT will be removed from STN

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

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=> file reg	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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STRUCTURE FILE UPDATES: 15 MAY 2003 HIGHEST RN 516445-69-5
DICTIONARY FILE UPDATES: 15 MAY 2003 HIGHEST RN 516445-69-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e methacrylic anhydride/cn
E1 1 METHACRYLIC AMIDE/CN
E2 1 METHACRYLIC AMIDE-METHYL METHACRYLATE-TRIMETHYLOLPROPANE
TRI
METHACRYLATE COPOLYMER/CN
E3 1 --> METHACRYLIC ANHYDRIDE/CN
E4 1 METHACRYLIC ANHYDRIDE POLYMER/CN
E5 1 METHACRYLIC ANHYDRIDE, POLYMER WITH 1,3,6-DIOXATHIOCANE/CN
E6 1 METHACRYLIC ANHYDRIDE, POLYMER WITH 1,3,6-TRIOXOCANE/CN

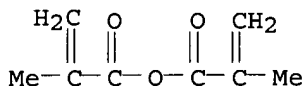
E7 1 METHACRYLIC ANHYDRIDE, POLYMER WITH 1,3-DIOXOLANE/CN
 E8 1 METHACRYLIC ANHYDRIDE, POLYMER WITH
 1-(ALLYLOXY)-3-(DODECYLT
 HIO)-2-PROPANOL/CN
 E9 1 METHACRYLIC ANHYDRIDE, POLYMER WITH ACRYLIC ANHYDRIDE/CN
 E10 1 METHACRYLIC ANHYDRIDE, POLYMER WITH MALEIC ANHYDRIDE/CN
 E11 1 METHACRYLIC ANHYDRIDE, POLYMER WITH METHYL METHACRYLATE/CN
 E12 1 METHACRYLIC ANHYDRIDE, POLYMER WITH TETRAHYDROFURAN/CN

=> e3

L1 1 "METHACRYLIC ANHYDRIDE"/CN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 760-93-0 REGISTRY
 CN 2-Propenoic acid, 2-methyl-, anhydride (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN **Methacrylic anhydride (6CI, 8CI)**
 OTHER NAMES:
 CN Methacrylic acid anhydride
 CN Methacryloyl anhydride
 FS 3D CONCORD
 MF C8 H10 O3
 CI COM
 LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,
 CASREACT,
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CSChem, HODOC*, HSDB*, IFICDB,
 IFIPAT,
 IFIUDB, MSDS-OHS, PIRA, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

495 REFERENCES IN FILE CA (1957 TO DATE)
 76 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 495 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e methacrylic acid/cn

E1 1 METHACRYLESTER C 13, POLYMER WITH BUTYL
 2-METHYL-2-PROPENOAT
 E, ETHENYLBENZENE, METHYL 2-METHYL-2-PROPENOATE,
 1,2-PROPANE
 DIOL MONO(2-METHYL-2-PROPENOATE) AND 2-PROPENOIC ACID/CN
 E2 1 METHACRYLESTER C 13, POLYMER WITH
 N,N-DIMETHYL-N-2-PROPENYL-
 2-PROPEN-1-AMINIUM CHLORIDE/CN
 E3 1 --> METHACRYLIC ACID/CN
 E4 1 METHACRYLIC ACID .BETA.-CHLOROETHYL ESTER/CN
 E5 1 METHACRYLIC ACID .BETA.-ISOCYANATOETHYL ESTER/CN

E6 1 METHACRYLIC ACID 2,2-DIETHYLHYDRAZIDE/CN
 E7 1 METHACRYLIC ACID 2-AMINOETHYL ESTER, ACETATE/CN
 E8 1 METHACRYLIC ACID 2-ETHYL-2-METHYLHYDRAZIDE/CN
 E9 1 METHACRYLIC ACID 2-ETHYL-2-PROPYLHYDRAZIDE/CN
 E10 1 METHACRYLIC ACID 2-HYDROXYETHANESULFONIC ACID ESTER/CN
 E11 1 METHACRYLIC ACID 2-METHYL-2-PROPYLHYDRAZIDE/CN
 E12 1 METHACRYLIC ACID 3,4-DICHLOROANILIDE/CN

=> e3

L2 1 "METHACRYLIC ACID"/CN

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 79-41-4 REGISTRY

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN **Methacrylic acid** (8CI)

OTHER NAMES:

CN .alpha.-Methacrylic acid

CN .alpha.-Methylacrylic acid

CN 2-Methyl-2-propenoic acid

CN 2-Methylacrylic acid

CN GE 110

CN Loctite 3298

CN Methylacrylic acid

CN Norsocryl MAA

FS 3D CONCORD

DR 463311-95-7

MF C4 H6 O2

CI COM

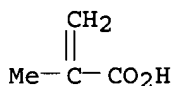
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
 BIOBUSINESS,

BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DDFU,
 DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
 ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
 MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT,
 RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2,
 USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

17684 REFERENCES IN FILE CA (1957 TO DATE)

8643 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

17697 REFERENCES IN FILE CAPLUS (1957 TO DATE)

11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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=> e acetic anhydride/cn
E1      1      ACETIC ACRYLIC ANHYDRIDE/CN
E2      1      ACETIC ALDEHYDE/CN
E3      1  --> ACETIC ANHYDRIDE/CN
E4      1      ACETIC ANHYDRIDE 1:2 COMPLEX WITH THIONYL CHLORIDE/CN
E5      1      ACETIC ANHYDRIDE LABELED WITH CARBON-14/CN
E6      1      ACETIC ANHYDRIDE, BI COMPLEX/CN
E7      1      ACETIC ANHYDRIDE, BISMUTH COMPLEX/CN
E8      1      ACETIC ANHYDRIDE, CD COMPLEX/CN
E9      1      ACETIC ANHYDRIDE, COMPD. WITH
1,4-DIAZABICYCLO(2.2.2)OCTANE/
CN
E10     1      ACETIC ANHYDRIDE, COMPD. WITH 2-AMINOBENZOTHAZOLE
3-OXIDE/C
N
E11     1      ACETIC ANHYDRIDE, COMPD. WITH 2-PICOLINE/CN
E12     1      ACETIC ANHYDRIDE, COMPD. WITH 2-PICOLINE (1:1)/CN

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=> e3
L3      1  "ACETIC ANHYDRIDE"/CN

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=> d l3

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L3  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN  108-24-7  REGISTRY
CN  Acetic acid, anhydride (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  Acetic anhydride (8CI)
OTHER NAMES:
CN  Acetic oxide
CN  Acetyl acetate
CN  Acetyl anhydride
CN  Acetyl ether
CN  Acetyl oxide
CN  Ethanoic anhydride
FS  3D CONCORD
MF  C4 H6 O3
CI  COM
LC  STN Files:  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSChem, CSNB, DETHERM*, DIPPR*,
EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*,
HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC,
PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,
ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources:  DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

```

Ac—O—Ac

****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

```

13726 REFERENCES IN FILE CA (1957 TO DATE)
338 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13747 REFERENCES IN FILE CAPLUS (1957 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
18.50	18.71

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:58:54 ON 16 MAY 2003
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FILE COVERS 1907 - 16 May 2003 VOL 138 ISS 21
FILE LAST UPDATED: 15 May 2003 (20030515/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l1

L4 495 L1

=> l2

L5 17696 L2

=> l3

L6 13752 L3

=> l1 and l2

495 L1
17696 L2
L7 98 L1 AND L2

=> l4 and l5

L8 98 L4 AND L5

=> l8 and l6

L9 15 L8 AND L6

=> phenothiazine

16182 PHENOTHIAZINE
4067 PHENOTHIAZINES
L10 17149 PHENOTHIAZINE
(PHENOTHIAZINE OR PHENOTHIAZINES)

=> hydroquinone

41691 HYDROQUINONE
2212 HYDROQUINONES
L11 42497 HYDROQUINONE
(HYDROQUINONE OR HYDROQUINONES)

=> \l10 or l11
1678 \L10
('L10')
L12 44175 \L10 OR L11

=> l10 or l11
L13 59272 L10 OR L11

=> l9 and l13
L14 3 L9 AND L13

=> d l14 1-3 ti fbib abs

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
TI Process for the batch manufacture of (meth)acrylic anhydrides
AN 2003:20007 CAPLUS
DN 138:73680
TI Process for the batch manufacture of (meth)acrylic anhydrides
IN Dupont, Bernard; Paul, Jean-Michel
PA Atofina, Fr.
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1273565	A1	20030108	EP 2002-291695	20020705
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	FR 2826961	A1	20030110	FR 2001-9009	A 20010706
	US 2003018217	A1	20030123	FR 2001-9009	20010706
				US 2002-186017	20020628
				FR 2001-9009	A 20010706
	JP 2003040832	A2	20030213	JP 2002-191878	20020701
				FR 2001-9009	A 20010706
	CN 1396149	A	20030212	CN 2002-140293	20020704
				FR 2001-9009	A 20010706
AB	(meth)acrylic anhydrides are prepd. in a batch process by reacting acetic anhydride with either acrylic acid or methacrylic acid with elimination of				
	a part of the formed acetic acid followed by its replacement in the reaction mixt. with acetic anhydride and/or (meth)acrylic acids.				
RE.CNT	3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD				
	ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
TI Dehydration process and catalyst for the preparation of methacrylic anhydride from methacrylic acid and acetic anhydride
AN 2002:610347 CAPLUS
DN 137:155284
TI Dehydration process and catalyst for the preparation of methacrylic anhydride from methacrylic acid and acetic anhydride
IN Schmitt, Bardo; Knebel, Joachim; Klesse, Wolfgang; Wittkowski, Andrea; Laux, Bededikt
PA Roehm G.m.b.H. & Co. K.-G., Germany
SO Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1231201	A1	20020814	EP 2002-2119	20020129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10106352	A1	20020822	DE 2001-10106352A	20010209
	JP 2002275124	A2	20020925	DE 2001-10106352	20010209
				JP 2002-29706	20020206
				DE 2001-10106352A	20010209
	US 2002161260	A1	20021031	US 2002-68849	20020211
				DE 2001-10106352A	20010209
AB	Methacrylic anhydride is manufd. by the dehydration of methacrylic acid and acetic anhydride in the presence of a catalyst (e.g., chromium acetate) and a polymn. inhibitors (e.g., phenothiazine and hydroquinone).				

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
 TI Synthesis of (meth)acrylic anhydride from (meth)acrylic acid
 AN 1988:22432 CAPLUS
 DN 108:22432
 TI Synthesis of (meth)acrylic anhydride from (meth)acrylic acid
 IN Hurtel, Patrice; Laurent, Denis; Rondini, Joseph
 PA Societe Chimique des Charbonnages, Fr.
 SO Fr. Demande, 5 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2592040	A1	19870626	FR 1985-19116	19851224
	FR 2592040	B1	19880715		
	EP 231689	A1	19870812	EP 1986-402759	19861211
	EP 231689	B1	19901003		
	R: AT, BE, CH, DE, ES, GB, GR, IT, LI, LU, NL, SE				
	AT 57177	E	19901015	FR 1985-19116	19851224
				AT 1986-402759	19861211
				FR 1985-19116	19851224
				EP 1986-402759	19861211
	JP 62158237	A2	19870714	JP 1986-316041	19861224
	JP 03035304	B4	19910527		
	US 4857239	A	19890815	FR 1985-19116	19851224
				US 1988-188585	19880429
				FR 1985-19116	19851224
				US 1986-945989	19861224
AB	The reaction of (meth)acrylic acid with Ac2O in the absence of a catalyst and the presence of a polymn. inhibitor gives (meth)acrylic anhydride (i.e., for use in monomer prepn.) in high yield with min. formation of impurities. The AcOH is removed during the reaction. A mixt. of 430 parts methacrylic acid and 255 parts Ac2O, contg. 2000 ppm phenothiazine and 2000 ppm methylene blue, was heated at 48-63.degree./50-100 mm with removal of AcOH, followed by distn. in vacuo to give 335 parts methacrylic anhydride.				

=> logff hold
 0 LOGFF
 29061 HOLD
 20908 HOLDS

49248 HOLD
(HOLD OR HOLDS)
L15 0 LOGFF HOLD
(LOGFF(W)HOLD)

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	20.44	39.15
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:05:36 ON 16 MAY 2003

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LOGINID:sssptal623paz

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 12:14:32 ON 16 MAY 2003
FILE 'CAPLUS' ENTERED AT 12:14:32 ON 16 MAY 2003
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	20.44	39.15
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

=> d his

(FILE 'HOME' ENTERED AT 11:57:21 ON 16 MAY 2003)

FILE 'REGISTRY' ENTERED AT 11:57:28 ON 16 MAY 2003

	E METHACRYLIC ANHYDRIDE/CN
L1	1 E3
	E METHACRYLIC ACID/CN
L2	1 E3
	E ACETIC ANHYDRIDE/CN
L3	1 E3

FILE 'CAPLUS' ENTERED AT 11:58:54 ON 16 MAY 2003

L4	495 L1
L5	17696 L2
L6	13752 L3
L7	98 L1 AND L2
L8	98 L4 AND L5
L9	15 L8 AND L6
L10	17149 PHENOTHIAZINE
L11	42497 HYDROQUINONE

L12 44175 \L10 OR L11
L13 59272 L10 OR L11
L14 3 L9 AND L13
L15 0 LOGFF HOLD

=> catalyst

624191 CATALYST
624225 CATALYSTS
L16 798956 CATALYST
(CATALYST OR CATALYSTS)

=> l9 and l16

L17 8 L9 AND L16

=> d l17 1-8 ti

L17 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Dehydration process and **catalyst** for the preparation of methacrylic anhydride from methacrylic acid and acetic anhydride

L17 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Synthesis and polymerization of epoxy methacrylates, 2 acylated epoxy methacrylates and their copolymers

L17 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Organoborane-amine complex initiator systems and polymerizable compositions made therewith

L17 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Crosslinkable polysaccharides, polycations and lipids useful for encapsulation of drugs and cells and manufacture of wound dressings

L17 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Polymer-catalyzed synthesis of acid anhydrides

L17 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Synthesis of (meth)acrylic anhydride from (meth)acrylic acid

L17 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Continuous manufacture of carboxylic anhydrides

L17 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI .alpha., .beta.-Unsaturated acids and anhydrides

=> d l17 1-8 ti fbib abs

L17 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Dehydration process and **catalyst** for the preparation of methacrylic anhydride from methacrylic acid and acetic anhydride

AN 2002:610347 CAPLUS

DN 137:155284

TI Dehydration process and **catalyst** for the preparation of methacrylic anhydride from methacrylic acid and acetic anhydride

IN Schmitt, Bardo; Knebel, Joachim; Klesse, Wolfgang; Wittkowski, Andrea; Laux, Bededikt

PA Roehm G.m.b.H. & Co. K.-G., Germany

SO Eur. Pat. Appl., 6 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1231201	A1	20020814	EP 2002-2119	20020129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10106352	A1	20020822	DE 2001-10106352A	20010209
	JP 2002275124	A2	20020925	DE 2001-10106352	20010209
				JP 2002-29706	20020206
				DE 2001-10106352A	20010209
	US 2002161260	A1	20021031	US 2002-68849	20020211
				DE 2001-10106352A	20010209
AB	Methacrylic anhydride is manufd. by the dehydration of methacrylic acid and acetic anhydride in the presence of a catalyst (e.g., chromium acetate) and a polymn. inhibitors (e.g., phenothiazine and hydroquinone).				
RE.CNT	5	THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT			

L17 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Synthesis and polymerization of epoxy methacrylates, 2 acylated epoxy methacrylates and their copolymers

AN 2001:455945 CAPLUS

DN 135:195876

TI Synthesis and polymerization of epoxy methacrylates, 2 acylated epoxy methacrylates and their copolymers

AU Kammer, Silvio; Keomara, Kim; Sandner, Barbara; Schreiber, Ramona

CS Institut fur Technische und Makromolekulare Chemie, Martin-Luther-Universitat, Halle/Saale, D-06099, Germany

SO Macromolecular Materials and Engineering (2001), 286(5), 276-284
CODEN: MMENFA; ISSN: 1438-7492

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

AB Partially (20-75%) acylated isopropylidene-bis[1,4-phenylene oxy(2-hydroxy trimethylene)] dimethacrylate (BisGMA) was prepd. by a single step reaction of 2,2-bis[4-(2,3-epoxy propoxy)phenyl]propane (DGEBA) with methacrylic acid (MAA), methacrylic anhydride (MAAn) and/or acetic anhydride catalyzed by 0.8 mol-% N-Me imidazole at 90-100.degree.C. In any case, MAA was substituted by an equimolar quantity of the anhydride. The reaction kinetics of DGEBA with MAA and MAAn follows a first order law

up to a conversion of epoxy groups corresponding to the initial molar ratio of MAAn. The viscosity of BisGMA decreased with an increase in the acylation degree. Acylated BisGMA was copolymd. with triethylene glycol dimethacrylate by use of a redox initiator system at room temp. and with vinyltoluene (VT) initiated by di-tert-Bu peroxide at 150-200.degree.C, resp., both in the presence of 70-76 wt.-% of quartz filler. Different dependencies of the content of sol and the conversion of C=C double bonds were obsd. for thermally polymd. composites from VT with acetylated and methacrylated BisGMA, resp. Methacrylated BisGMA yielded composites with reduced water uptake. The higher network d. of the polymer matrix with methacrylated BisGMA resulted in a higher glass transition temp. Tg and a higher storage modulus of the composites. The initial temp. of wt. loss of composites with VT was increased from 230.degree.C for composites with BisGMA up to 258.degree.C for composites with BisGMA methacrylated to a degree of 40%.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Organoborane-amine complex initiator systems and polymerizable compositions made therewith

AN 1998:268527 CAPLUS

DN 128:322549

TI Organoborane-amine complex initiator systems and polymerizable compositions made therewith

IN Pocius, Alphonsus V.; Deviny, E. John

PA Minnesota Mining and Manufacturing Co., USA

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9817694	A1	19980430	WO 1997-US2766	19970225
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5935711	A	19990810	US 1996-735765 A	19961023
	AU 9719684	A1	19980515	US 1996-735765	19961023
				AU 1997-19684	19970225
				US 1996-735765 A	19961023
	EP 934344	A1	19990811	WO 1997-US2766 W	19970225
	EP 934344	B1	20021023	EP 1997-907773	19970225
	R: DE, FR, GB				
				US 1996-735765 A	19961023
				WO 1997-US2766 W	19970225
	BR 9712554	A	19991019	BR 1997-12554	19970225
				US 1996-735765 A	19961023
				WO 1997-US2766 W	19970225
	CN 1234041	A	19991103	CN 1997-198945	19970225
				US 1996-735765 A	19961023
	JP 2001502689	T2	20010227	JP 1998-519319	19970225
				US 1996-735765 A	19961023
				WO 1997-US2766 W	19970225

OS MARPAT 128:322549

AB A compn. comprises organoborane-amine complex and aziridine-functional material. The compn. can form a part of a polymn. initiator system that also includes a compd. such an acid that is reactive with the amine portion of the complex to liberate the organoborane. The system is useful

for initiation of polymn. of acrylic monomer in formation of acrylic adhesives that have exceptionally good adhesion to low surface energy polymers. A typical adhesive contained Me methacrylate (I) 8.45, Bu acrylate 6.08, Et acrylate-I copolymer thickener 6.73, methacrylic acid (amine-reactive compd.) 1.24, CX 100 [tris(methylaziridine) of trimethylolpropane triacrylate] 5.17, and Et3B-1,6-hexanediamine complex 2.33 g.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Crosslinkable polysaccharides, polycations and lipids useful for

encapsulation of drugs and cells and manufacture of wound dressings
 AN 1993:525199 CAPLUS
 DN 119:125199
 TI Crosslinkable polysaccharides, polycations and lipids useful for
 encapsulation of drugs and cells and manufacture of wound dressings
 IN Soon-Shiong, Patrick; Desai, Neil P.; Sandford, Paul A.; Heintz, Roswitha
 A.; Sojomihardjo, Soebianto
 PA Clover Consolidated, Ltd., Switz.
 SO PCT Int. Appl., 53 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT.12

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9309176	A2	19930513	WO 1992-US9364	19921029
	WO 9309176	A3	19930722		
	W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
				US 1991-784267 A	19911029
	AU 9331247	A1	19930607	AU 1993-31247	19921029
				US 1991-784267 A	19911029
				WO 1992-US9364 A	19921029
	EP 610441	A1	19940817	EP 1992-925046	19921029
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
				US 1991-784267 A	19911029
				WO 1992-US9364 W	19921029
	US 5837747	A	19981117	US 1994-232054	19940428
				US 1991-784267 B	19911029
				WO 1992-US9364 A	19921029

PATENT FAMILY INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9206678	A1	19920430	WO 1991-US7051	19910925
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	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
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	AU 9187557	A1	19920520	AU 1991-87557	19910925
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				WO 1991-US7051 A	19910925
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	EP 553195	B1	19970611		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
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				US 1994-336393 A	19941110

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9316687	A1	19930902	WO 1993-US1776	19930301

W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ,
PL, RO, RU, SD, SK, UA
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

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AU 683209 B2 19971106
AU 1993-37809 19930301

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US 1992-870540 A 19920420
US 1992-958870 A 19921007
WO 1993-US1776 A 19930301
EP 627912 A1 19941214
EP 1993-907078 19930301

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,
SE

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US 1992-870540 A 19920420
US 1992-958870 A 19921007
WO 1993-US1776 W 19930301
JP 07506961 T2 19950803
JP 3011767 B2 20000221
JP 1993-515100 19930301

US 1992-843485 A 19920228
US 1992-870540 A 19920420
US 1992-958870 A 19921007
WO 1993-US1776 W 19930301
BR 9306041 A 19971118
BR 1993-6041 19930301
US 1992-843485 A 19920228
US 1992-870540 A 19920420
US 1992-958870 A 19921007
WO 1993-US1776 W 19930301

FAN 1993:656535
PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI WO 9317669 A1 19930916 WO 1993-US1773 19930301
W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO,
NZ, PL, RO, RU, SD, SK, UA
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9337353 A1 19931005 AU 1992-843485 A 19920228
AU 673160 B2 19961031 AU 1993-37353 19930301

US 1992-843485 A 19920228
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EP 627911 A1 19941214 EP 1993-906255 19930301
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,
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JP 07507056 T2 19950803 JP 1993-515790 19930301
JP 3011768 B2 20000221

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BR 9306038 A 19980113 BR 1993-6038 19930301
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FAN	1995:599622				
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				US 1991-740703 A2	19910805
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				US 1990-598880 A3	19901015
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				US 1992-843485 B2	19920228
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				US 1995-379848 A3	19950127
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				US 1993-22687 A3	19930301
				US 1995-379848 A3	19950127
				US 1995-468364 A3	19950606
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				US 1990-598880 B1	19901015
				US 1994-336393 A3	19941110
	US 6060582	A	20000509	US 1998-128917	19980804
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				US 1995-379848 A3	19950127
				US 1995-468364 A3	19950606
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				US 1993-22687 A1	19930301
				US 1994-336393 A2	19941110
				US 1995-379848 A2	19950127
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				US 1993-22687 A3	19930301
				US 1995-379848 A3	19950127
				US 1995-468364 A3	19950606

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 EP 231689 A1 19870812 EP 1986-402759 19861211
 EP 231689 B1 19901003

R: AT, BE, CH, DE, ES, GB, GR, IT, LI, LU, NL, SE

AT 57177 E 19901015 FR 1985-19116 19851224
 AT 1986-402759 19861211
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 EP 1986-402759 19861211
 JP 62158237 A2 19870714 JP 1986-316041 19861224
 JP 03035304 B4 19910527
 US 4857239 A 19890815 FR 1985-19116 19851224
 US 1988-188585 19880429
 FR 1985-19116 19851224
 US 1986-945989 19861224

AB The reaction of (meth)acrylic acid with Ac₂O in the absence of a catalyst and the presence of a polymn. inhibitor gives (meth)acrylic anhydride (i.e., for use in monomer prepn.) in high yield with min. formation of impurities. The AcOH is removed during the reaction. A mixt. of 430 parts methacrylic acid and 255 parts Ac₂O, contg. 2000 ppm phenothiazine and 2000 ppm methylene blue, was heated at 48-63.degree./50-100 mm with removal of AcOH, followed by distn. in vacuo to give 335 parts methacrylic anhydride.

L17 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI Continuous manufacture of carboxylic anhydrides

AN 1986:610785 CAPLUS

DN 105:210785

TI Continuous manufacture of carboxylic anhydrides

IN Bott, Kaspar; Anderlohr, Axel; Faust, Tillmann; Guth, Josef

PA BASF A.-G., Fed. Rep. Ger.

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3510035	A1	19860925	DE 1985-3510035	19850320
	JP 61215345	A2	19860925	JP 1986-52779	19860312
	JP 06021101	B4	19940323		
	EP 196520	A1	19861008	DE 1985-3510035	19850320
				EP 1986-103449	19860314
				R: AT, BE, CH, DE, FR, GB, IT, LI, NL	
	ES 553199	A1	19870116	DE 1985-3510035	19850320
				ES 1986-553199	19860320
				DE 1985-3510035	19850320

AB (RCO)₂O (R = satd. or unsatd. C₂-12 residue) are prepd. by acid-catalyzed reaction of Ac₂O with the corresponding acid. A packed distn. column with

.apprx.15 theor. plates, 1.5 m tall, having an internal diam. of 5 cm, was

maintained at 30 mbar. At the 5th plate, 340 g/h Ac₂O was added, and at the 10th plate, 5 g MeSO₃H in 430 g methacrylic acid was added hourly.

At the column head (reflux ratio 5), 300 g AcOH and 85 g Ac₂O were removed, while at the bottom, 385 g/h 99.4% pure methacrylic anhydride was removed.

L17 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS

TI .alpha.,.beta.-Unsaturated acids and anhydrides

AN 1978:460243 CAPLUS

DN 89:60243
 TI .alpha.,.beta.-Unsaturated acids and anhydrides
 IN Holmes, Jerry D.
 PA Eastman Kodak Co., USA
 SO U.S., 4 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4085143	A	19780418	US 1975-583937	19750605
				US 1975-583937	19750605

AB The title compds. were manufd. from HCHO and a satd. acid anhydride having

1 less carbon atom than the desired product in the vapor phase over a fixed-bed **catalyst**. A **catalyst** was prepd. by refluxing 72 g TiCl₄ in hexane with 100 g Davision G-59 silica gel for 5 h, washing with hexane, and hydrolyzing with aq. NH₄OH. The **catalyst** (50 mL) was heated 2 h at 550.degree. with 2.72 mol/h N flow and then heated in air .apprx.1.5 h at 550.degree.. A mixt. of 1.59 mol HCHO and 2.73 mol acetic anhydride [108-24-7] were fed, along with 1.25 mol/h N, into a reactor at 245-65.degree. contg. the **catalyst** to yield over a 3 h period a mixt. of acrylic acid [79-10-7] and acrylic anhydride [2051-76-5] with HCHO conversion 48% and acetic anhydride conversion 52%.

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
53.71	72.42

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-7.16	-7.16

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:20:13 ON 16 MAY 2003